

WHAT IS CLAIMED IS:

1. A method of shortening multiple image scanning duration, comprising the steps
of:

setting the scanning parameters of each image in a pre-scanning operation;

5 classifying the images into groups according to a categorization method;

assigning all images belonging to the same group to a scanning region; and

initializing the scanning operation.

2. The method of claim 1, wherein after scanning all scanning regions, images
belonging to the same scanning region are grouped together.

10 3. The method of claim 1, wherein the step of assigning images belonging to the
same group to the same scanning region further includes the sub-steps of:

selecting out a first unprocessed image to serve as a contrast-scanning region;

selecting the next in line unprocessed image and comparing with the contrast-
scanning region;

15 determining if the unprocessed image and the contrast-scanning region has a
common scanning line section;

integrating the selected unprocessed image and the contrast-scanning region to
become a new contrast scanning region if the unprocessed image and the original
contrast-scanning region has a common scanning line section;

20 assigning the contrast-scanning region to be a scanning region if the selected
unprocessed image and the contrast-scanning region has no common scanning line
section; and

repeating the aforementioned steps until all images are processed.

4. The method of claim 1, wherein the scanning parameters includes the resolution of the image and the data quantity of the image.

5. The method of claim 1, wherein the categorization method includes grouping all images containing a common scanning line section together.

5 6. The method of claim 1, wherein the categorization method includes grouping all images having a number of scanning stops within a preset scanning stop range together.

7. The method of claim 1, wherein the categorization method includes grouping all images having a resolution within a preset resolution range together.

10 8. The method of claim 1, wherein the categorization method includes grouping all images having user-defined properties together.

9. The method of claim 1, wherein the categorization method further includes grouping the images together according to common scanning line sections, preset scanning stop number ranges, image resolution ranges, user-defined properties or various
15 combinations of the above.